

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www wayto gov

| APPLICATION NO.  | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO       |  |  |
|--|-----------------------------------|----------------------|---------------------|-----------------------|--|--|
| 10/589,099   | 06/11/2007                        | Ha-Soon Choi         | P1126US10           | 6685                  |  |  |
| 29490<br>GENOMICS I  | 7590 03/16/201<br>NSTITUTE OF THE | 0                    | EXAM                | UNER                  |  |  |
| NOVARTIS RESEARCH FOUNDATION<br>10675 JOHN JAY HOPKINS DRIVE, SUITE E225 |                                   |                      | MOORE, SUSANNA      |                       |  |  |
|  | CA 92121-1127                     | , SUITE E225         | ART UNIT            | ART UNIT PAPER NUMBER |  |  |
|  |                                   |                      | 1624                |                       |  |  |
|  |                                   |                      |                     |                       |  |  |
|  |                                   |                      | NOTIFICATION DATE   | DELIVERY MODE         |  |  |
|  |                                   |                      | 03/16/2010          | ELECTRONIC            |  |  |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPLegal@gnf.org jclarke@gnf.org ssesnovich@gnf.org

# Application No. Applicant(s) 10/589,099 CHOI ET AL. Office Action Summary

| Office Action Gammary   | Examiner  | Art Unit   |              |  |  |  |  |
|---|---|--|--------------|--|--|--|--|
|   | SUSANNA MOORE   | 1624   |              |  |  |  |  |
| The MAILING DATE of this communication app  | ears on the cover sheet with the c  | orrespondence ac   | ldress       |  |  |  |  |
| Period for Reply  |   |  |              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MALING D. Extensions of time may be available under the provisions of 37 CPR 1.1 after SX (6) MORTEN from the making date of this communication.  If NO period for reply is specified above, the maximum statisticity period Any reply received by the Office later than three months after the making earned patient term adjustmens. See 37 CPR 1.7405. | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a repty be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N.<br>nely filed<br>the mailing date of this o<br>D (35 U.S.C. § 133). | ,            |  |  |  |  |
| Status  |   |  |              |  |  |  |  |
| 1) Responsive to communication(s) filed on  |   |  |              |  |  |  |  |
|   | action is non-final.  |  |              |  |  |  |  |
| 3) Since this application is in condition for allowar   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |              |  |  |  |  |
| closed in accordance with the practice under E  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |              |  |  |  |  |
| Disposition of Claims   |   |  |              |  |  |  |  |
| 4) Claim(s) <u>1-10</u> is/are pending in the application.  |   |  |              |  |  |  |  |
| 4a) Of the above claim(s) is/are withdray   |   |  |              |  |  |  |  |
| 5) Claim(s) is/are allowed.   | WITHOUT CONSIDERATION.  |  |              |  |  |  |  |
| 6) Claim(s) is/are rejected.  |   |  |              |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |  |              |  |  |  |  |
| 8) Claim(s) 1-10 are subject to restriction and/or  | election requirement  |  |              |  |  |  |  |
|   | siection requirement.   |  |              |  |  |  |  |
| Application Papers  |   |  |              |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | r.  |  |              |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ acc  | epted or b) objected to by the i  | Examiner.  |              |  |  |  |  |
| Applicant may not request that any objection to the   | drawing(s) be held in abeyance. See   | 37 CFR 1.85(a).  |              |  |  |  |  |
| Replacement drawing sheet(s) including the correct  | ion is required if the drawing(s) is obj  | ected to. See 37 C   | FR 1.121(d). |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex   | aminer. Note the attached Office  | Action or form P   | ГО-152.      |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |              |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C. § 119(a)   | -(d) or (f).   |              |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |   |  |              |  |  |  |  |
| <ol> <li>Certified copies of the priority documents</li> </ol>  | s have been received.   |  |              |  |  |  |  |
| <ol><li>Certified copies of the priority documents</li></ol>  | 2. Certified copies of the priority documents have been received in Application No  |  |              |  |  |  |  |
| <ol><li>Copies of the certified copies of the prior</li></ol>   | ity documents have been receive   | ed in this National  | Stage        |  |  |  |  |
| application from the International Bureau   | ı (PCT Rule 17.2(a)).   |  |              |  |  |  |  |
| * See the attached detailed Office action for a list  | of the certified copies not receive   | d.   |              |  |  |  |  |
|   |   |  |              |  |  |  |  |
| Attachment(s)   |   |  |              |  |  |  |  |
| Notice of References Cited (PTO-892)  | 4) Interview Summary  | (PTO-413)  |              |  |  |  |  |
| Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da   | ite  |              |  |  |  |  |
| 3). Information Disclesure Statement(s) (FTO/SB/00)   | 5) Notice of Informal P 6) Other:   | atent Application  |              |  |  |  |  |
| Paper No(s)/Mail Date   | 6) L. Oulei   |  |              |  |  |  |  |

Art Unit: 1624

#### DETAILED ACTION

This case is being examined by a different Examiner. Any previous restriction requirement made by phone is withdrawn.

## Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group (I), claim(s) 1-7, drawn to the compounds in claim 1 of formulas Ia, Ib and Id, pyrrolo[2,3-d]pyrimidines, and compositions thereof.

Group (II), claim(s) 1-7, drawn to the compounds in claim 1 of formula Ic and Ie, pyrido[2,3-d]pyrimidines, and compositions thereof.

Group (III), claims 8 and 9, drawn to the methods of treating on of the diseases in said claims with the compounds of Group (I and II). If Applicant elects this group, one of Groups (I-II) must be elected.

Group (IV), claim(s) 10, drawn to a nonstatuatory claim.

The claims herein lack unity of invention under PCT rule 13.1 and 13.2 since, under 37

CFR 1.475(a) Group I -Group IV lack unity of invention since under 37 CFR 1.475:

Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features...those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The technical feature corresponding to Group I, formula Ia, is the pyrrolo[2,3-d]pyrimidine scaffold. The technical feature corresponding to Group II, formula Ic, is the pyrido[2,3-d]pyrimidine scaffold. The special technical features of Groups III is drawn to a

Art Unit: 1624

method of intended use of the compounds of Groups (I-II). Group IV is drawn to a nonstatuatory claim. The special technical feature of Group Ia can be found in US 20050272676 A1. Therefore the above claims are not so linked as to form a single general inventive concept and there is a lack of unity of invention because they lack a common technical feature. Accordingly, unity of invention is considered to be lacking and restriction of the invention in accordance with the rules of unity of invention is considered to be proper.

Furthermore, since the groups do not relate to a single general inventive concept under PCT Rule 13.1 and lack the same or corresponding special technical features, the claims lack unity of invention and should be limited to the groups restricted above. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Further, even if unity of invention under 37 C.F.R. § 1.475(a) were not lacking, under 37 C.F.R. § 1.475(b) a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations:

- (1) a product and a process specially adapted for the manufacture of said product; or
- (2) a product and a process of use of said product; or
- a product, a process specially adapted for the manufacture of the said product, and a use of the said product;
- (4) a process and an apparatus or means specifically designed for carrying out the said process;or
- (5) a product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

Art Unit: 1624

And, according to 37 C.F.R. § 1.475(c): If an application contains claims to more or less than one of the combinations of categories of invention set forth in paragraph (b), unity of invention might not be present.

Therefore, because the claims are drawn to products and multiple methods of use of compounds of formula (I), according to 37 C.F.R. § 1.475(e), the determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim. The claims in the instant application lack unity of invention and should be limited to one product, one method of use, or one process of preparing the product.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## Rejoinder Advisory

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. <u>All</u> claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

Art Unit: 1624

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the Examiner before the patent issues. See MPEP § 804.01.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSANNA MOORE whose telephone number is (571)272-9046. The examiner can normally be reached on M-F 8:00-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson can be reached on (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/589,099 Page 6

Art Unit: 1624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susanna Moore/ Examiner, Art Unit 1624